

IN THE CLAIMS:

1-7. (Canceled).

8. (Currently Amended) A laser light source comprising:

a semiconductor laser which emits a laser light; and

an optical element which ~~emits~~ transmits the laser light,

said optical element comprising:

a plurality of waveguides transmitting the laser light; and

a plurality of light path coupling parts which couple adjacent waveguides and optically couple said plural waveguides serially, the plurality of light path coupling parts comprising:

a reflection plane which reflects and refracts laser light passing through the waveguides,

~~wherein a path of the laser light for transmitting the laser light in the plurality of waveguides is curved at said optical path coupling part a distance L along the path from a light input surface of the waveguides to a light output surface of the waveguides satisfies the following equation:~~

$$L \geq W/\tan(\sin^{-1}(\sin(\theta/2)/n)),$$

wherein W is a width of the waveguide,

n is a refractive index inside the waveguide, and

θ is a minimum beam spread angle of the semiconductor laser.

9. (Currently Amended) ~~An optical element~~The laser light source as defined in claim 8 further comprising:

a convex lens or a plano-convex lens ~~which is disposed on~~ located in an optical path between the semiconductor laser and the optical element and makes a spread angle of the laser light incident to the optical element smaller than a spread angle of the laser light emitted from the semiconductor laser.

10. (Currently Amended) ~~A~~The laser light source as defined in claim 8 further comprising:

~~a cylindrical lens is disposed on~~ located in the path between said semiconductor laser and said optical element.

11. (Currently Amended) ~~A~~The laser light source as defined in claim 10, wherein the cylindrical lens is a plano-concave lens.

12. (Currently Amended) ~~A~~The laser light source as defined in claim 8, wherein a light incident surface of the optical element is in a curved configuration with a curvature.

13. (Currently Amended) A two-dimensional image forming apparatus comprising:
a laser light source emitting a laser light comprising:
a plurality of waveguides transmitting a light; and

a plurality of light path coupling parts which couple adjacent waveguides and optically couple said plurality of waveguides serially, the plurality of light path coupling parts comprising:
a reflection plane which reflects and refracts laser light passing through the waveguides;

a space optical modulation part that modulates the laser light emitted from the laser light source; and

an illumination optical system for illuminating the laser light that is outputted from the laser light source to the space light modulation part, wherein

a path for transmitting lights through the plurality of waveguides is curved at said optical path coupling partsa distance L along the path from a light input surface of the waveguides to a light output surface of the waveguides satisfies the following equation:

$$L \geq W/\tan(\sin^{-1}(\sin(\theta/2)/n)),$$

wherein W is a width of the waveguide,

n is a refractive index inside the waveguide, and

θ is a minimum beam spread angle of the laser light source.

14. (Currently Amended) AThe two-dimensional image forming apparatus as defined in claim 13 further comprising:

a projection optical system which projects the laser light that is emitted from the space optical modulation part.

15. (New) The laser light source as defined in claim 8, wherein said plurality of waveguides is an odd number of waveguides, and said odd number of waveguides are overlapping with each other in parallel with the light transmission direction of said waveguides.

16. (New) The laser light source as defined in claim 8, wherein external surfaces other than a light input surface and a light output surface of the waveguides and said light path coupling parts are coated with a reflection film reflecting the transmitting light.

17. (New) The laser light source as defined in claim 8, wherein said light path coupling parts comprise inclined surfaces which are inclined with respect to a plane vertical to the light transmission direction and are integrated with said waveguides at one or both ends of adjacent waveguides.

18. (New) The laser light source as defined in claim 8, wherein said waveguides comprise a hollow structure in which gas or liquid, and Brownian particles, are sealed.

19. (New) The laser light source as defined in claim 18, wherein said Brownian particles are colloid particles.